



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/606,479	06/26/2003	Robert J. Smith JR.	16930-1	5653

23486 7590 02/23/2004

SHUTTLEWORTH & INGERSOLL, P.L.C.
115 3RD STREET SE, SUITE 500
P.O. BOX 2107
CEDAR RAPIDS, IA 52406

EXAMINER

MACARTHUR, VICTOR L

ART UNIT	PAPER NUMBER
----------	--------------

3679

DATE MAILED: 02/23/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/606,479

Applicant(s)

SMITH ET AL.

Examiner

Victor MacArthur

Art Unit

3679

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 9/22/2003.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Claim Objections

Claims 1, 15 and 16 are objected to because of the following informalities:

- It appears that the applicant intends for claim 1 to be broad enough to include both a bicycle seat assembly and axle assembly since both claims 16 and 17 depend from claim 1. However, the claim 1 recitation of “the fixed component having a first member and a second member moveable...” is confusing when applied to claim 16. For purposes of examination the examiner reads the limitations “removable component” and “fixed component” broadly enough to allow for both claims 16 and 17 to depend from claim 1. However, the applicant should completely rewrite the claims to improve clarity. Furthermore, for purposes of examination, the phrase “removable” (line 1 of claim 16) should be replaced with “fixed” since it is the fixed component that has “a first member and a second member” (lines 2-3 of claim 1).
- Claim 15 should be amended to depend from claim 2 rather than claim 1 in order to give proper antecedent basis to the limitation “latching mechanism” (lines 1-2 of claim 15).

Appropriate correction is required. For purposes of examining the instant invention, the examiner has assumed these corrections have been made.

Claim Rejections - 35 USC § 102

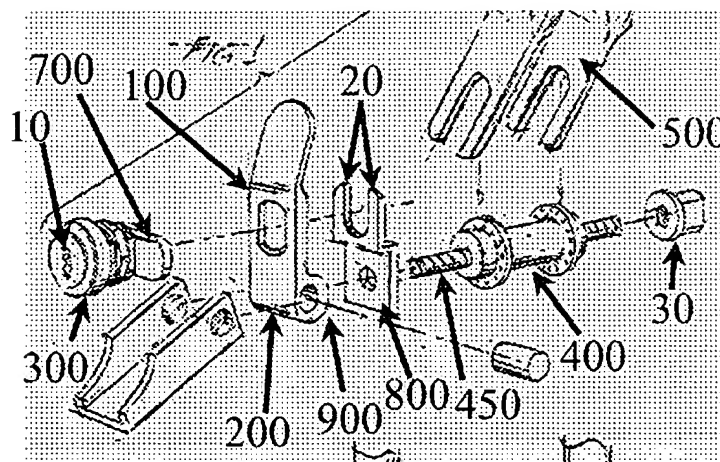
The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

Art Unit: 3679

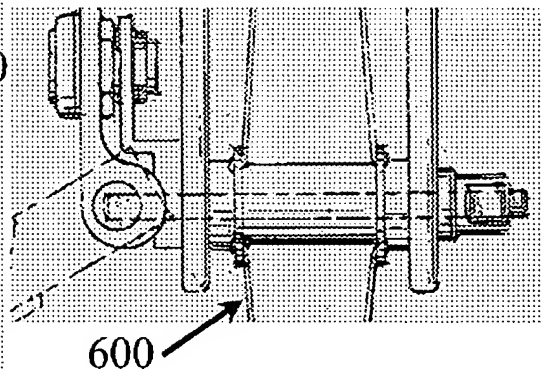
A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-6, 8-13, 15, 16, 18, 19, 21 and 22 are rejected under 35 U.S.C. 102(b) as being anticipated by Katsouros US 2002/0026816 (Note that the drawings of the prior art do not contain reference numerals, therefore the reference numerals in the marked-up figures below do not correspond to those listed in the prior art detailed description of the drawings, but are merely used by the examiner to describe how the drawings disclose the applicant's claim limitations).



Marked up Fig.1



Marked-up Fig.2

Claim 1. Katsouros discloses a locking quick release device for lockingly affixing a removable component (500) to a fixed component (100, 200 and 400 are fixed to wheel 600), the fixed component having a first member (100, 200) and a second member (400) moveable toward and away from each other between a first position (as seen in fig.2) in which the removable component is affixed to the fixed component and a second position (seen in fig.3) in which the removable component is removable from the fixed component, said locking quick release device comprising: a lever (100, 200) having a handle end (100) and a pivot end (200), the lever being

Art Unit: 3679

movable about the pivot end between an open position and a closed position so that movement of the lever to the closed position causes the members to move to the first position and movement of the lever to the open position causes the members to move to the second position; and a locking mechanism (300) operatively combined with the handle end of the lever to selectively prevent movement of the lever about its pivot end when the locking mechanism is actuated into a locked position.

Claim 2. Katsouros discloses that locking mechanism has a latching mechanism (700); and a receiving member (800) is combined with the fixed component for receiving the latching mechanism to provide for locking of the lever to the fixed component and thereby prevent removal of the removable component from the fixed component when the locking mechanism is actuated into a locked position.

Claim 3. Katsouros discloses that the receiving member is combined (in that 800 is attached to 100, 200) with the lever.

Claim 4. Katsouros discloses that the locking mechanism and lever are combined (via 400) with the removable component.

Claim 5. Katsouros discloses that the locking mechanism and lever are combined with the fixed component.

Claim 6. Katsouros discloses wherein the lever further comprises a cam surface (900) near the lever pivot end so that movement of the lever to the closed position moves the first and second members to the first position in which they are closer together, and movement of the lever to the open position moves the first and second members to the second position in which they are farther apart.

Art Unit: 3679

Claim 8. Katsouros discloses that the locking mechanism has a first end (near 700) and a second end (near 10) with a key slot (10) at the second end, said key slot being adapted to receive a key.

Claim 9. Katsouros discloses that the latching mechanism is turnable between a first and a second position when the key is inserted into and engaged within the key slot.

Claim 10. Katsouros discloses that the receiving member comprises a catch mechanism (20) that prevents the lever from moving to the open position when the latching mechanism is engaged in its second position and the lever is in the closed position.

Claim 11. Katsouros discloses that the catch mechanism is comprised of locking pins (elements 200 comprise locking pins within the broadest reasonable interpretation of the claim language).

Claim 12. Katsouros discloses a bore (receiving 450) through both the first and the second members; and a threaded member (450) having a first end (right end of 450) and a second end (left end of 450) with threads on the first end, said threaded member second end combined with the lever near the lever pivot end, said threaded member passing through the bore with said threaded member first end being threaded into one of the members so that rotation of the lever causes the threaded member to move the first and second members closer together and farther apart.

Claim 13. Katsouros discloses a bore (receiving 450) through both the first and the second members; a threaded member (450) having a first end (right end of 450) and a second end (left end of 450) with threads on the first end, said threaded member second end combined with the lever near the lever pivot end, said threaded member passing through the bore; and a thumb

Art Unit: 3679

screw (30) threaded onto the threaded member first end, said thumb screw capable of moving the first and second members closer together and farther apart when the thumb screw is moved relative to the threaded member.

Claim 15. Katsouros discloses that the latching mechanism is a locking plate.

Claim 16. Katsouros discloses that the fixed component is a hub and axle assembly for a bicycle wheel, and the locking quick release device is attached to the hub and axle assembly.

Claim 18. Katsouros discloses a method for locking and unlocking a removable component to a bicycle frame wherein the removable component (400, 450) is positioned between two holding members (500) tightened by a movable lever (100) that includes a locking mechanism (300) that is engaged with a receiving member (20), said method comprising: inserting the removable component (400, 450) between the holding members; tightening the removable component between the holding members by moving the lever (100); moving the lever to a closed position (as seen in fig.2) wherein a portion of the locking mechanism becomes engaged with the receiving member; and operating the locking mechanism so that the lever is locked in the closed position.

Claim 19. Katsouros discloses that the locking mechanism includes a key slot (10) adapted to receive a key.

Claim 21. Katsouros discloses that the lever includes a cam surface (900) so that as the lever is moved toward the receiving member, the holding members are drawn closer together to further tighten the removable component in between the holding members.

Claim 22. Claim Katsouros discloses that the lever comprises the locking mechanism (300).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 7 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Katsouros US 2002/0026816 in view of Chang U.S. Patent 5479836.

Claim 7. Katsouros discloses that the removable component is a set of bicycle forks (500). Katsouros does not disclose a seat post. Chang teaches (figs. 3-5, 8 and col.1-4) that it is beneficial for first (21) and second (34) members to be combined with a collar (A) adapted to receive the removable component (B) and the removable component is a bicycle seat post, the diameter of the collar becoming smaller as the lever is moved to a closed position, for the purpose of deterring theft of a bicycle seat post. Therefore, it would have been obvious to one with ordinary skill in the art at the time the invention was made to modify the Katsouros assembly to be used on a bicycle seat post, as taught by Chang, for the purpose of deterring theft of a bicycle seat post.

Claim 17. Katsouros discloses that the removable component is a set of bicycle forks (500). Katsouros does not disclose a seat post. Chang teaches (figs. 3-5, 8 and col.1-4) a removable component that is a bicycle seat assembly, and that a locking quick release device is attached to the bicycle seat assembly, for the purpose of securing a bicycle seat assembly against theft. Therefore, it would have been obvious to one with ordinary skill in the art at the time the

Art Unit: 3679

invention was made to modify Katsouros to be used on a bicycle seat post assembly, for the purpose of securing a bicycle seat post against theft.

Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Katsouros US 2002/0026816 in view of the applicant's admitted prior art.

Claim 14. Katsouros discloses that the locking mechanism is a key lock. The applicants admitted prior art (specification, p.12) states that it is well know to replace key locks with combination locks since combination locks do not require a user to carry a key. Therefore, it would have been obvious to one with ordinary skill in the art at the time the invention was made to modify the locking mechanism of Katsouros to be a key lock, for the purpose of not requiring a user to carry a key.

Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Katsouros US 2002/0026816.

Claim 20. Katsouros does not expressly disclose engaging the locking mechanism using the key. However, the examiner takes official notice that engaging locking mechanisms like the Katsouros key lock (page 1, para.15 and 16) with a key is very well known in the art to do. In fact the only reasonable way to operate a key lock is by engagement with a key.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Art Unit: 3679

Referring to locking levers:

Ng U.S. Patent 5511894

Dean U.S. Patent 601712

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Victor MacArthur whose telephone number is (703) 305-5701.

The examiner can normally be reached on 8:30am - 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lynne Browne can be reached on (703) 308-1159. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1113.



VLM

February 13, 2004



Lynne H. Browne
Supervisory Patent Examiner
Technology Center 3600